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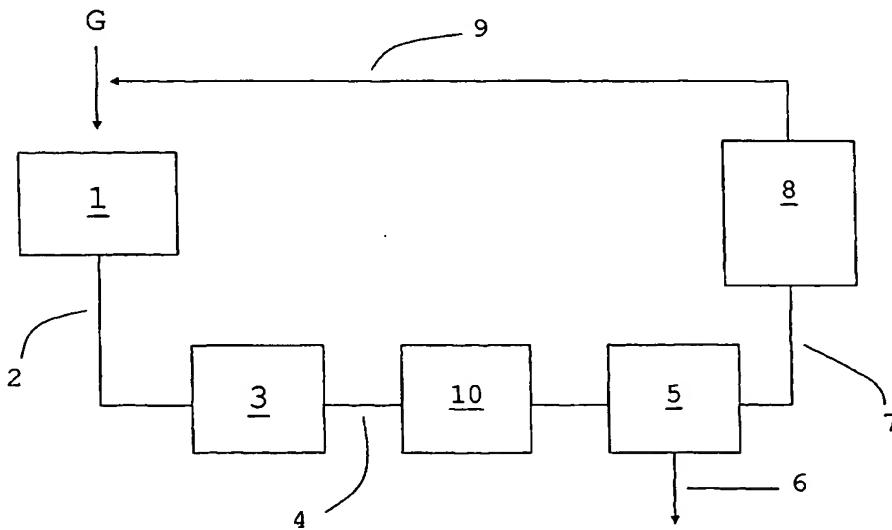
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(54) Title: UTILISATION OF WASTE GAS STREAMS



(57) **Abstract:** In a process and apparatus for utilisation of an ammonia-containing waste gas stream from a semiconductor processing step, ammonia contained in the waste gas stream is decomposed, for example, in a reactor (3), into hydrogen and nitrogen, the gas stream so obtained is passed through a hydrogen separator (5) in order to separate hydrogen gas therefrom, the separated hydrogen gas is purified in a purifier (8), and the purified hydrogen gas is recycled for use in semiconductor processing. The process and apparatus allow efficient usage of semiconductor processing waste gases by permitting recycling of a component thereof.

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